Amendments to the Claims:

Please cancel claims 1 to 37 and add claims 38 to 81 as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

38. (New) Device for treating biological material comprising at least one chamber which at least can be closed to the outside, said chamber comprising

an inner space for receiving said biological material,

at least one electrode for generating an electric field and which is in contact with said inner space of said chamber,

at least one inlet line which comprises at least one opening which is disposed at said electrode,

wherein at least one reservoir for receiving a solution, which is formed by a wall, is connectable or connected to said inner space via said inlet line, and

wherein said inner space of said chamber and said reservoir are separated from each other by a separating unit which is designed so that it can be broken by extraneous mechanical impact.

39. (New) The device of claim 38, wherein said inlet line is tube-like.

40. (New) The device of claim 38, wherein the inner diameter of said inlet line decreases in the direction of said electrode.

41. (New) The device of claim 38, wherein said separating unit is a valve or a fragile membrane which can be destroyed by applying pressure.

42. (New)The device of claim 38, wherein said chamber is at least aseptically sealed to the outside.

43. (New) The device of claim 38, wherein said wall forming said reservoir comprises an elastic and/or deformable material.

44. (New) The device of claim 38, wherein said reservoir is at least connected to said chamber forming one piece with the chamber or connectable to said chamber via a connecting member.

45. (New) The device of claim 44, wherein said connecting member is a Luer lock.

46. (New) The device of claim 44, wherein said chamber and said reservoir form a unit which is at least aseptically sealed to the outside.

47. (New) The device of claim 38, wherein said chamber comprises at least one wall area which is self-sealing and can be perforated or which is equipped with at least one inlet comprising a connecting member.

48. (New) The device of claim 47, wherein said connecting member is a Luer lock.

49. (New) The device of claim 38, wherein said chamber is formed like a serpent and/or spiral.

50. (New) The device of claim 38, wherein said chamber is divided into several subunits by at least one dividing member.

51. (New) The device of claim 50, wherein said dividing member comprises a valve and/or a filter.

52. (New) The device of claim 38 further comprising a container, wherein said container

is at least connectable to or connected to an outlet opening of said chamber or connectable to said chamber via a connecting member.

53. (New) The device of claim 52, wherein said container is connected to said chamber forming one piece with said chamber.

54. (New) The device of claim 52, wherein said connecting member is a Luer lock.

55. (New) The device of claim 52, wherein a partition member is disposed between said chamber and said container.

56. (New) The device of claim 55, wherein said partition member is a valve or a filter.

57. (New) The device of claim 52, wherein said container comprises at least one wall area which is self-sealing and can be perforated or which is equipped with at least one outlet comprising a connecting member.

58. (New) The device of claim 57, wherein said connecting member is a Luer lock.

59. (New) The device of claim 52, wherein said container is a syringe or an infusion pot.

60. (New) The device of claim 52, wherein said container and said chamber form a unit which is aseptically sealed to the outside.

61. (New) The device of claim 47, wherein said wall area which is self-sealing and can be perforated comprises a synthetic material.

62. (New) The device of claim 61, wherein the synthetic material is polysiloxane, an elastomer or rubber.

63. (New) The device of claim 38,

wherein said chamber comprises two oppositely arranged electrodes which are in contact with said inner space, or

wherein a further electrode can be introduced into said inner space of said chamber.

64. (New) The device of claim 38, wherein said electrode or electrodes comprise(s) an electro-conductive synthetic material.

65. (New) The device of claim 64, wherein said electro-conductive synthetic material is a plastic material which is doped with conductive material.

66. (New) A method for treating biological material comprising:

providing an inner space of a chamber which at least can be closed to the outside, said inner space comprising

at least one electrode which is placed in contact with said inner space of said chamber for generating an electric field in said inner space after introducing said biological material by applying voltage to said electrode and a further electrode which is in contact with said inner space of said chamber,

introducing said biological material into said inner space of said chamber,

after generating the electric field, almost completely rinsing said biological material out of said inner space of said chamber with a solution, said solution being guided from a reservoir containing said solution via an inlet line of said chamber along at least one electrode and said reservoir being connected or connectable to said chamber via said inlet line, and

wherein a separating unit which separates said inner space of said chamber from said reservoir is opened by extraneous mechanical impact.

67. (New) The method of claim 66, wherein said solution is guided along said electrode

under pressure.

68. (New) The method of claim 66, wherein said electrode is a cathode.

69. (New) The method of claim 66, wherein said biological material is introduced into said inner space of said chamber with a syringe or a syringe-like device through a wall area which is self-sealing and can be perforated.

70. (New) The method of claim 66, wherein said separating unit is a valve which can be opened by extraneous mechanical impact at least in one direction, or a fragile membrane which can be destroyed by extraneously applied pressure.

71. (New) The method of claim 66, wherein said biological material and said solution, respectively, are introduced into a container which is at least connectable to an outlet opening of said chamber.

72. (New) The method of claim 66, wherein said reservoir which contains said solution is at least partially formed by an elastic and/or deformable wall and a pressure is extraneously applied to said wall.

73. (New) The method of claim 66, wherein said biological material is rinsed into said container through a partition member, which is disposed between said chamber and said container.

74. (New) The method of claim 73, wherein said partition member is a valve and/or filter.

75. (New) The method of claim 70, wherein treated biological material is removed from said container using a syringe or syringe-like device through a wall area which is self-sealing and can be perforated.

76. (New) The method claim 66, wherein said biological material comprises living cells, derivatives of cells, sub-cellular particles and/or vesicles, into which biologically active molecules are transferred by generation of said electric field, or which are fused by generation of said electric field.

77. (New) The method of claim 76, wherein said cells are eukaryotic cells.

78. (New) The method of claim 76, wherein said biologically active molecules are nucleic acids.

79. (New) The method of claim 76, wherein said biologically active molecules are dissolved in a buffer solution and introduced into the inner space of said chamber before the biological material is added.

80. (New) The method of claim 76, wherein the transfer of said biologically active molecules into said living cells is achieved via a current density of up to 120 A/cm^2, preferably 80 A/cm^2, or by a voltage pulse having a field strength of 2 - 10 $kV*cm^{-1}$ and a duration of 10 - 200 μs.

81. (New) The method of claim 80, wherein the transfer of said biologically active molecules into said living cells is achieved by a current flow following said voltage pulse without interruption, said current flow having a current density of 2 - 14 A/cm^2, preferably 5 A/cm^2, and and a duration of 1 - 100 ms, preferably 50 ms.